Surname		Othe	er Names			
Centre Number			Candid	ate Number		
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For Examiner's Use

General Certificate of Secondary Education June 2007

HOME ECONOMICS (FOOD AND NUTRITION) Higher Tier

3562/H





Thursday 21 June 2007 1.30 pm to 3.30 pm

You will need no other materials.

You may use a calculator.

Time allowed: 2 hours

Instructions

- Use blue or black ink or ball-point pen.
- Fill in the boxes at the top of this page.
- Answer all questions.
- Answer the questions in the spaces provided.
- If there is not enough space for your answer(s), use the extra page(s) at the end of this book. If you do this, make sure that you show the number(s) of the question(s) you are answering.

Information

- The maximum mark for this paper is 136.
- The marks for questions are shown in brackets.
- You are reminded of the need for good English and clear presentation in your answers. Quality of Written Communication will be assessed in answers written in continuous prose.

For Examiner's Use				
Question	Mark	Question	Mark	
1		5		
2		6		
3		7		
4		8		
Total (Column 1)				
Total (Column 2)				
TOTAL				
Examiner's Initials				

M/Jun07/3562/H 3562/H

Answer all questions in the spaces provided.

1	(a)	Give three reasons why we need to eat food.
		(3 marks)

(b) The table below shows DRVs for energy.

Age	Male (Kcal per day)	Female (Kcal per day)
0–3 months	545	515
1–3 years	1230	1165
4–6 years	1715	1545
7–10 years	1970	1740
11–14 years	2220	1845
15–18 years	2755	2110
19–50 years	2550	1940
51–59 years	2550	1900
60–64 years	2380	1900
65–74 years	2330	1900
75+	2100	1810

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(i)	What are the energy needs of males and females aged 15–18 years?			
	Male	. Kcal		
	Female	. Kcal		
			(2 marks)	

(ii)	Why do males have different energy needs to females?	
(iii)	Why do energy needs change with age?	(1 mark)
Whic	ch three nutrients supply the body with energy?	(1 mark)
		(3 marks)
Expl	ain what happens if we eat more food than our body requires.	
	t is meant by the following terms:	(2 marks)
(i)	a balanced diet;	
(ii)	energy balance;	(1 mark)
(iii)	basal metabolic rate?	(1 mark)
		(1 mark)

2 (a) The table below shows trends in the consumption of fruit and vegetables in the UK.

Consumption per person per week					
Food	1975	1985	1995	2000	2004
Potatoes (g)	1378	1340	1077	1002	864
Fresh green vegetables (g)	341	287	233	246	228
Processed vegetables (g)	385	459	431	395	346
Fresh fruit (g)	511	540	693	765	789
Processed fruit (g)	228	286	375	424	401
Fruit juices (ml)	42	165	272	332	322

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Using the information in the table describe the trends in the consumption of fruit and vegetables.
(6 marks)

(b) Select **three** foods from the list below and complete the table.

(6 1
in the following forms.

Frozen fruit
Advantage
Disadvantage
Canned fruit
Advantage
Disadvantage
Dried fruit
Advantage
Disadvantage
(8 marks)
Explain what happens if vegetables are left to soak in water before cooking.
(2 marks)

(d)

3 Look at the two school lunch menus below. Menu 1 Menu 2 Cheese and tomato pizza Beef burgers Baked jacket potato Chips Green salad Spaghetti hoops Fresh fruit Chocolate cake Which menu is the healthy option? (a) Give reasons for your choice. Chosen menu (1 mark) Reasons for choice.... (6 marks) (b) Why is it important for school meals to provide a variety of choice for children from different ethnic backgrounds?

Turn over

(1 mark)

(c)	Many children eat snacks between meals. Give three examples of healthy snack foods.
	orve three enumpres or neutring shack roots.
	(3 marks)
(d)	List five points to consider before planning an evening meal for a family.
	(5 marks)

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4 The table below shows the nutrients found in different cheeses.

Nutrient (per 100 g)	Cheddar	Low fat cheddar	Edam	Feta	Cottage cheese
Energy (kcal)	412	261	333	250	98
Protein (g)	25.5	31.5	26	15.6	13.8
Fat (g)	34.4	15	25.4	20.2	3.9
Calcium (mg)	720	840	770	360	73
Sodium (salt) (mg)	670	670	1020	1440	380

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(a)	(i)	Which cheese has the highest salt content?	
			(1 mark)
	(ii)	Which cheese has the lowest fat content?	
			(1 mark)
	(iii)	Which cheese has the highest calcium content?	
			(1 mark)
(b)		g the table above suggest one cheese suitable for each of the following. reasons.	
	(i)	someone on a weight-reducing diet	
			(2 marks)
	(ii)	someone with high blood pressure	
			(2 marks)

	(iii)	children	
			(2 marks)
(c)	How	would you store a packet of cheese after it has been opened?	
			(2 marks ₎
d)	What	t happens to cheese when it is cooked?	
			(2 marks)
(e)	What	t are the functions of calcium in the diet?	
	•••••		
			(2 marks)
(f)	Nam	e the vitamin needed for the proper absorption of calcium.	
			(1 mark)

5	(a)	Complete the table below by naming one food product that can be made from each
		type of cereal.

Type of cereal	Food product
Oats	
Wheat	
Rye	
Rice	

(4 marks)

(b)	Explain the differences between white and wholemeal flour.	
		••••••
		(3 marks)
(c)	Why are raising agents added to some recipes?	
		(2 1)
		(2 marks)
(d)	Name the substance that is added to plain flour to make self-raising flour.	
		(1 1)
		(1 mark)

(e)	Give	e three ways air can be added to a mixture.
		(3 marks)
(f)	Wha	t is gluten?
		(2 marks)
(g)	Nam	e one type of flour that could be used to make each of the following mixtures.
	(i)	Shortcrust pastry
	(ii)	Victoria sandwich cake
	(iii)	Bread
		(3 marks)

(h)	Describe the changes that take place during the cooking of a white sauce.
	(6 marks)

Turn over for the next question

6	(a)	Suggest five pieces of electrical equipment you could buy to save time and effort when preparing and cooking food. Give reasons for each choice.
		(9 marks)

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8 Nutritional needs vary at different life stages. For the life stages below discuss what the nutritional needs are. Give examples of how these needs can be met.			
	 Pregnancy Babies (aged 0–9 months) Elderly 		
		••	
		••	
		••	
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(15 marks)

END OF QUESTIONS

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